

Further Notes on the Microhabitat of *Taeniocerus pygmaeus* (Coleoptera, Passalidae)¹⁾

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Abstract Three observations on the biology of the passalid beetle, *Taeniocerus pygmaeus*, were made in the Malay Peninsula and Borneo, and it was confirmed that *T. pygmaeus* was specialized to utilize the microhabitats produced by termite activities.

All the species of the genus *Taeniocerus* (Coleoptera, Passalidae), *T. bicanthatus* (PERCHERON), *T. bicuspis* KAUP, *T. platypus* KAUP and *T. pygmaeus* KAUP, have markedly wide front tibiae, which are supposed to be related to living in detritus-like microhabitats (JOHKI & KON, 1987). Of these, *T. bicanthatus* and *T. platypus* have been known to live in the detritus-like microhabitats, the interface between fallen trees and the ground (KON & JOHKI, 1987; KON & ARAYA, 1992).

In the previous report (KON *et al.*, 1996), we suggested that the microhabitat of *Taeniocerus pygmaeus* may be associated with termite colonies. Thereafter, we had opportunities to make additional observations on the biology of this species in relation to termites, and herewith report them briefly.

On 22 Mar. 1996, at Kota Tinggi, located in the southern part of the Malay Peninsula, one female of *T. pygmaeus* was collected from the surface of decayed log of the rubber tree, *Hevea brasiliensis*, which was colonized by the termite, *Coptotermes* sp.

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(Isoptera, Rhinotermitidae). When this log with the termite colony was once examined in the daytime several hours before the discovery of the female of *T. pygmaeus* in the evening, nothing was found. Therefore, this female appeared to be attracted to the log with the termite nest in that evening.

On 28 Aug. 1996, at Sepilok near Sandakan, Sabah in Borneo, one colony of *T. pygmaeus* was collected from a decayed log. This colony consisted of 2 carcasses of black adults, 4 teneral adults (1 ♂, 3 ♀♀) and 4 pupae in cocoons. The gallery was excavated into the clay-like rotten wood substance around an abandoned termite nest. Although the termite nest had already been abandoned and secondarily invaded by ants, it was supposed that the nest was made by *Coptotermes* sp. or some other termite species having similar habit since general features of the nest and its circumstances were very similar to those observed in the former case in Kota Tinggi.

On 30 Mar. 1997, at Templer's Park near Kuala Lumpur, in the Malay Peninsula, one male of this species was collected from the same kind of microhabitat as reported for the former case in Sepilok.

These observations, together with the previous ones (KON *et al.*, 1996), support the hypothesis that *T. pygmaeus* is "termitariophilous" in the sense of IWATA *et al.* (1992); i.e., specialized to utilize the microhabitats produced by termite activities.

Interestingly, in all the three cases, a number of adults and larvae of the Ceratocanthidae (Coleoptera, Scarabaeoidea) were found together with *T. pygmaeus*. Up to the present, various species belonging to the superfamily Scarabaeoidea have been reported to be likely termitophilous and/or termitariophilous (BOUCOMONT, 1936; RITCHER, 1958; HOWDEN, 1973; HOWDEN & GILL, 1988; BARTOLOZZI, 1989; IWATA *et al.*, 1992; ARAYA, 1994; OCHI, 1996, etc.). It is expected that much more species of the Scarabaeoidea will be revealed to be associated with termites by close examinations of termite nests and their surroundings, especially in the lowlands of the tropical and sub-tropical regions.

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要 約

常喜 豊・荒谷邦雄・近 雅博: *Taeniocerus pygmaeus* (クロツヤムシ科) の微小生息場所に関する知見 (続報). — *Taeniocerus pygmaeus* の営巣が、倒木中のシロアリのコロニー周辺でなされるらしいことを、前報 (KON *et al.*, 1996) で述べた。その後、ボルネオ島サンダカン郊外のセピロクの森において、倒木中につくられたシロアリのコロニー周辺のデトリタス状物質中に、*T. pygmaeus* のコロニーを確認したほか、マレーシアのコタティンギおよびテンブラー公園においても、本種とシロアリの関係の強さを示唆する観察を行うことができた。これらのことより、本種は、シロアリの活動で生じたデトリタス状の木屑中で生活するように特化した種であると考えられる。

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